



PERGAMON

Applied Radiation and Isotopes 57 (2002) XIII–XV

Applied  
Radiation and  
Isotopes

[www.elsevier.com/locate/apradiso](http://www.elsevier.com/locate/apradiso)

## AUTHOR INDEX VOLUME 56

Abbas, K. 703  
Abdel-Fattah, A.A. 557  
Adam, J. 607  
Aerts, J. 871  
Aiachi, A. 637  
Al-Azmi, D. 991  
Al-Dahhan, M.H. 485  
Al-Otoom, A.Y. 589  
Alber, D. 145  
Albinsson, Y. 681  
Aldo, F. 117  
Altitzoglou, T. 199, 399, 447  
Alves, R.N. 169  
Amano, H. 759  
Ambe, S. 473  
Arnold, D. 71, 405  
Asai, M. 543  
Atun, G. 797  
Auerbach, P. 265  
  
Bäck, S.Å.J. 895  
Baeza, A.S. 717  
Baker, J.D. 567  
Baker, M. 321, 343  
Baker, M.I. 327  
Balabekyan, A. 607  
Baldock, C. 895  
Banerjee, S. 571  
Baran, N.P. 815  
Bass, G.A. 321  
Baytas, A.F. 601  
Bé, M.-M. 181  
Belgya, T. 535  
Ben Kraiem, H. 93  
Benny, P.G. 891  
Bercea, S. 957  
Bergmann, R. 773  
Bernardes, E.M.O. 157, 457  
Berne, A. 57  
Berrazzouk, S. 985  
Bhatt, B.C. 891  
Bidovec, M. 649  
Bilgin, B. 797  
Blanco Rodriguez, M.P. 393  
Blessing, G. 685  
Bouchard, J. 245, 269  
Bouhlassa, S. 637  
Braghirolli, A.M.S. 361  
Briançon, C. 189  
Broda, R. 281, 285  
  
Brust, P. 773  
Buzinny, M. 717  
Byun, J.I. 307  
  
Cabrera, M.E.M. 931  
Carrier, M. 21  
Cassette, P. 285  
Cassette, Ph. 461  
Cerutti, G.L. 47  
Cessna, J.T. 315, 337  
Cha, I.-s. 697  
Chen, H. 735  
Chen, W.-L. 901  
Cho, S.O. 697  
Cho, Y.H. 307  
Choi, J.-s. 697  
Choi, O. 307  
Chou, W.T. 627  
Chu, T.-C. 477, 505  
Chumak, V.V. 917  
Chyliński, A. 281  
Cicognani, G. 833  
Clark, D. 85  
Coenen, H.H. 519, 673, 685  
Collé, R. 5, 223, 331  
Comagic, S. 847  
Coron, N. 245  
Coursey, B.M. 1, 3, 5  
Coursey, J.S. 5  
Coursol, N. 189, 231  
Crespo, M. 415  
Crispim, V.R. 937  
Cristina Razdolescu, A. 349, 435, 461  
Cruz, P.A.L. 457  
Cserpák, F. 821  
Csete, I. 467  
Cummings, B. 57  
  
da Conceição, C.C.S. 409  
D'Alberti, F. 703  
da Silva Jr., E.F. 563  
da Silva, A.X. 937  
da Silva, C.J. 157, 169, 361  
da Silva, C.P.G. 361  
Dávila Rangel, J.I. 931  
de Azevedo, W.M. 563  
Debertin, K. 999  
Debnath, M.C. 863  
del Rio, H.L. 931  
Delgado, J.U. 137, 157, 169  
  
de Marcillac, P. 245  
de Meijer, R.J. 837  
Denecke, B. 199, 415, 447  
de Oliveira, A.E. 361, 409  
Desrosiers, M.F. 917  
Dias, M.S. 105, 441  
Ding, H.-J. 853  
Ding, S. 877  
Dong, W.M. 765  
dos Santos, R.N. 741  
Dryak, P. 111  
Duduković, M.P. 485  
Dumitrescu, C. 957  
  
Effinger, R.T. 65  
Eichhorn, U. 505  
Ekberg, C. 681  
Ember, P.P. 535  
Endo, A. 615  
Escoffier, E. 833  
Espartero, A.G. 41  
Etcheverry, M. 137, 173, 415  
Evans, C.J. 711  
  
Fernández Timón, A. 51  
Ferreira, A.C.M. 409  
Filliben, J.J. 57  
Fonseca, K.A. 441  
Forte, M. 703  
Füchtner, F. 773  
Fujiki, K. 131  
  
Gaca, P. 717  
García, F.M. 931  
García, G. 295  
García-León, M. 633  
García-Orellana, I. 633  
García-Torano, E. 211  
García-Torano, E. 415  
Gehrke, R.J. 567  
Gerstenberg, H.M. 525  
Gleisberg, B. 387  
Goncalves, I.F. 945  
Görner, W. 145  
Gorozhankin, V.M. 189  
Grau Carles, A. 153  
Grau Malonda, A. 153, 295  
Griffin, H.C. 215  
Grigorescu, E.L. 349, 435, 461  
Guadalupi, G.M. 833

Guang Yan, C. 253  
 Guillen, J. 717  
 Günther, E. 291, 357  
 Guo, J. 735  
 Gutiérrez, S. 787  
 Hamacher, K. 519  
 Hamkens, W. 505  
 Hardy, J.C. 65, 215  
 Havelka, M. 265  
 Hayashi, N. 131  
 Heinrich, T. 387  
 Hejdelman, A.M. 37  
 Helmer, R.G. 65  
 Henriksen, G. 667  
 Hernández, A.T. 787  
 Herzog, H. 673  
 Hino, Y. 131, 421  
 Hirschfelder, Th. 519  
 Ho, J.P.Y. 953  
 Ho, S.-T. 853  
 Hoff, P. 667  
 Höhnemann, S. 847  
 Holgersson, S. 681  
 Hongxia, Z. 959  
 Huang, C.-Y. 477, 505  
 Hult, M. 399  
 Husband, L.J. 415  
 Hwang, H.-Y. 307  
 Hwang, W.-S. 261, 429  
 Iacob, V. 215  
 Iacob, V.E. 65  
 Iakovlev, K. 173  
 Iglicki, F.A. 47  
 Iida, T. 615  
 Inn, K.G.W. 57, 379  
 Inoue, H. 659  
 Ishakoglu, A. 601  
 Ishchenko, S.S. 815  
 Ivan, C. 349, 435, 461  
 Iwahara, A. 157, 169, 361  
 Jakobsson, A.-M. 681  
 Janssen, H. 215, 415  
 Janszen, H. 3  
 Jasińska, M. 717  
 Jeong, Y.U. 697  
 Jerome, S.M. 415  
 Johannsen, B. 773  
 Johansson, L. 199, 447  
 Johnston, P.N. 399  
 Joshi, S.H. 863  
 Jun, J.-S. 307  
 Kadono, K. 621  
 Kaina, B. 505  
 Kalinnikov, V.G. 607  
 Kanda, Y. 615  
 Kao, A. 853  
 Karam, L.R. 3, 369, 379  
 Karmalitsyn, N.I. 453  
 Kasch, H. 773  
 Kastleiner, S. 685  
 Kawade, K. 543  
 Keightley, J.D. 205, 327  
 Keightley, L.J. 327  
 Khalil, N. 985  
 Kharitonov, I.A. 37  
 Khouri, H.J. 563  
 Kilislioglu, A. 797  
 Kim, M. 697  
 Klein, R. 215  
 Knobus, B. 387  
 Kobal, I. 649  
 Kochin, A.E. 453  
 Köhler, M. 387  
 Koizumi, M. 543  
 Kojima, Y. 543  
 Kong, X. 731  
 Koo, V.S.Y. 953  
 Korun, M. 77  
 Koskinas, M.F. 105, 441  
 Kovar, P. 111  
 Lahiri, S. 571  
 L'Annunziata, M.F. 907  
 Larachi, F. 485  
 Larsen, R.H. 667  
 Leblanc, E. 245  
 Leblanc, J. 245  
 Lee, B.C. 697  
 Lee, C.W. 307  
 Lee, J.-H. 429  
 Lee, J.M. 307  
 Lee, M.H. 307  
 Lemaire, C. 871  
 Lendgre, A. 681  
 Lepage, M. 895  
 Li, C. 857  
 Li, G. 731  
 Li, W. 253  
 Lian, Q. 253  
 Liang, J.H. 627  
 Likar, A. 99  
 Lin, J.-P. 477, 505  
 Lin, K.-H. 477  
 Lin, S.-Y. 505  
 Lin, Z. 57, 379  
 Lipnik, P. 65  
 Loidl, M. 245  
 Lopes, R.T. 361  
 Loureiro, J.S. 457  
 Lozano, J.C. 393  
 Luca, A. 173, 349, 415, 435, 461, 957  
 Ludington, M.A. 215  
 Luxen, A. 871  
 Mahjoub, A. 93  
 Majali, M.A. 863  
 Makepeace, J.L. 327  
 Maetka, K. 285  
 Man Lee, J. 275  
 Mania, J. 985  
 Manohar, S.B. 571  
 Marco, C. 117  
 Marnada, N. 163  
 Marques, L.S. 741  
 Martín Sánchez, A. 31, 51  
 Martinho, E. 945  
 Matsunaga, T. 759  
 Maučec, M. 837  
 Mayes, V.E. 65  
 McLaughlin, W.L. 1  
 McMahon, C.A. 369, 379  
 Meide, H. 959  
 Meigooni, A.S. 581  
 Méndez Vilas, A. 31  
 Metge, J.F. 245  
 Michotte, C. 15, 415  
 Mietelski, J.W. 717  
 Misdaq, M.A. 985  
 Mishra, K.K. 975  
 Mitev, K. 231  
 Miyahara, H. 131, 163  
 Molnár, G.L. 535  
 Moreau, I. 231  
 Morel, J. 85, 93, 137, 173, 181, 415  
 Morelle, J.-L. 871  
 Mosdzianowski, C. 871  
 Moutard, G. 21  
 Mrázek, J. 607  
 Mugunthamanikandan, N. 883  
 Murthy, J.S.R. 751  
 Mutamba, Q.B. 711  
 Nagao, S. 759  
 Nagata, H. 163  
 Nagy, V. 917  
 Nessler, E. 505  
 Neumaier, S. 405  
 Nikezic, D. 953  
 Niu, H. 627  
 Noguchi, H. 615  
 Nortier, F.M. 685  
 Nuevo Sánchez, M.J. 31  
 Nunes, W.V. 937  
 Oki, Y. 615  
 Okulov, S.M. 815  
 Oropesa, P. 787  
 Osa, A. 543  
 Ozaki, T. 473  
 Pallottini, L. 833  
 Paola, A. 117  
 Park, J.H. 307  
 Park, T.S. 307  
 Paschoa, A.S. 157  
 Passo Jr., C.J. 907  
 Pearce, A.K. 327  
 Pedroza, G. 563  
 Peulon, S. 21

Pibida, L. 369  
 Picolo, J.L. 21, 231  
 Piel, M. 847  
 Pierino, D.F. 117  
 Pillay, A.E. 577  
 Piña, G. 41  
 Poledna, R. 157, 169  
 Poljak, M. 649  
 Preuße, W. 387  
 Pritzkow, W. 145  
 Pronskikh, V.S. 607  
 Pu, Z. 731  
 Qaim, S.M. 673, 685, 821  
 Radoszewski, T. 281  
 Raghunath, V.M. 883  
 Rahn, R.O. 525  
 Ramaswami, A. 571  
 Rao, S.M. 751  
 Rasko, M.A. 37  
 Ratel, G. 415  
 Razdolescu, A.C. 957  
 Reguigui, N. 93  
 Ribeiro, F.B. 741  
 Riddle, C.L. 567  
 Riebe, G. 145  
 Rodig, H. 773  
 Rodríguez, M. 41  
 Rodriguez, L. 415  
 Rodríguez Barquero, L. 211  
 Rogante, M. 833  
 Römer, J. 773  
 Rösch, F. 505, 847  
 Roteta, M. 211  
 Roy, R.R.P. 975  
 Roy, S. 485  
 Rubio Montero, M.P. 31, 51  
 Saad, H.R. 991  
 Sahagia, M. 957  
 Sahagia, M. 349, 435, 461  
 Salgado, J. 945  
 Sanada, Y. 759  
 Sanchez-Vega, M. 65, 215  
 Santry, D. 415  
 Saravana Kumar, U. 751  
 Sato, K. 615  
 Saxena, S.K. 863  
 Sazonova, T.E. 453  
 Schäfer, I. 387  
 Schirrmacher, R. 505, 847  
 Schirru, R. 937  
 Schmid, A. 673  
 Schmitzer, C. 375  
 Schönfeld, E. 181, 215, 415  
 Schötzig, U. 415  
 Schrader, H. 237, 957  
 Schreckenberger, M. 505  
 Schroettner, T. 375  
 Schwaiger, M. 375  
 Sekido, S. 473  
 Sekine, T. 543  
 Selvasekarapandian, S. 883  
 Sepman, S. 173  
 Sepman, S.V. 37, 453  
 Serra, R. 787  
 Shchukin, G. 173  
 Sheng, J. 621  
 Shi, J. 735  
 Shiau, Y.-C. 853  
 Shibata, M. 543  
 Shilnikova, T.I. 453  
 Sholom, S.V. 917  
 Sibbens, G. 199, 415, 447  
 Sima, O. 71, 405  
 Simoens, F. 871  
 Simonelli, F. 703  
 Simpson, B.R.S. 301  
 Sivakumar, R. 883  
 Skarnemark, G. 681  
 Sloboda, R.S. 805  
 Sochorová, J. 265  
 Soon Park, T. 275  
 Sowards, K.T. 581  
 Spellerberg, S. 673  
 Stanga, D. 231  
 Steger, F. 375  
 Steinbach, J. 773  
 Stroosnijder, M.F. 703  
 Su, S.-H. 261  
 Suárez, J.A. 41  
 Sudár, S. 821  
 Sujo, L.C. 931  
 Suran, J. 111  
 Švec, A. 237  
 Szücs, L. 467  
 Takada, H. 759  
 Takeda, M.N. 105  
 Takeuchi, N. 131  
 Tanaka, Su. 615  
 Tanase, G. 435  
 Taniguchi, A. 543  
 Tao, Z.Y. 765  
 Tauhata, L. 157, 169, 361, 409  
 Taylor, D.M. 763, 1001  
 Tellmann, L. 673  
 Terechtchenko, E.E. 37  
 Terlikowska, T. 285  
 Terlikowska-Drozdziel, T. 281  
 Tewary, D.N. 975  
 Tkachenko, Y. 759  
 Tomé, F.V. 393  
 Tomankiewicz, E. 717  
 Torres, L.L.Q. 931  
 Tripathi, P.S.M. 975  
 Tsai, S.-C. 853  
 Tsigankov, N. 717  
 Tsoupko-Sitnikov, V. 21  
 Tsuda, S. 615  
 Tyler, D.K. 343  
 Tzaphlidou, M. 781  
 Unterweger, M.P. 125, 315  
 Utagawa, Y. 621  
 van der Walt, T.N. 685  
 Vaupotič, J. 649  
 Vavrina, G.A. 525  
 Vianna, M.E.C. 409  
 Vidmar, T. 99  
 Villalba, M.L. 931  
 Vogl, J. 145  
 Vorona, I.P. 815  
 Vylov, Ts. 189  
 Wallace, R.E. 581  
 Wang, G. 765  
 Wang, H. 877  
 Wang, J.-J. 853  
 Wang, R. 805  
 Wang, X. 857  
 Wang, X.K. 765  
 Waters, S. 327  
 Watt, G.C. 205  
 Weijuan, L. 967  
 Wenming, D. 959, 967  
 Wermann, G. 145  
 Willis, D.K. 65  
 Woodman, A.P. 327  
 Woods, D.H. 327, 415  
 Woods, M.J. 3, 321, 327, 343, 415  
 Woods, S.A. 327, 415  
 Wu, S.-C. 627  
 Wu, Z. 379  
 Wurdiyant, G. 163  
 Wuu, J.-L. 261  
 Xu, K. 877  
 Yakushev, E.A. 189  
 Yamaguchi, I. 473  
 Yanase, N. 759  
 Yazawa, T. 621  
 Yip, C.W.Y. 953  
 Yoe-Sein, M.M. 581  
 Yoshida, A. 163  
 Yu, K.N. 953  
 Yuan, L.G. 627  
 Yuan, M.-C. 261, 429  
 Yull Hwang, H. 275  
 Zaichick, V. 781  
 Zanevsky, A.V. 453  
 Zhang, F. 731  
 Zhang, J. 857  
 Zhong Ni, J. 253  
 Zhu, X. 731  
 Zimmerman, B.E. 223, 315  
 Živčić, M. 649  
 Zmazek, B. 649  
 Zsinka, A. 467  
 Zuyi, T. 959, 967





PERGAMON

Applied Radiation and Isotopes 57 (2002) XVII-XXXII

Applied  
Radiation and  
Isotopes

[www.elsevier.com/locate/apradiso](http://www.elsevier.com/locate/apradiso)

## SUBJECT INDEX VOLUME 56

### *Absorption*

Optical: effect of X-ray irradiation on soda lime glass 621

### *Accelerator mass spectrometry*

Comparison with  $\gamma$ -ray spectrometry for  $^{26}\text{Al}$  in meteorite samples 99

### *Activation analysis*

#### Neutron

Determination of Ca, P and Ca/P ratios in cortical bone from human femoral neck 781

For medium and heavy elements using a partially depleted  $^{252}\text{Cf}$  source 577

PGAA: improvement of capabilities by coincidence techniques 535

PGAA: use for explosives detection 937

### *Aerosol*

$^{38}\text{Cl}$  and  $^{39}\text{Cl}$  attached to DOP aerosol particles after irradiation of Ar gas size analysis 615

### *Alanine*

Dosimetry uncertainties in the therapeutic dose range 917

### *Algorithm*

Peak fitting for  $^{241}\text{Am}$  and  $^{243}\text{Am}$  competence for resolution of overlap 57

### *Alumina*

Sorption and desorption of Co(II): effect of humic substances 765

### *Aluminium*

#### $^{26}\text{Al}$ in meteorites

$\gamma$ -spectrometric measurement in deep underground laboratory 405

Low level measurements 399

Box: use of associated particle timing based on the D + D reaction for imaging 711

### *Americium*

$\text{Am}^{3+}$  complexes with fulvic and humic acids: stability constants 959

$^{241}\text{Am}$ : accumulation and dissolution in river bed sediment near Chernobyl 751

$^{241}\text{Am}$  and  $^{243}\text{Am}$  peak overlap: resolution competence of  $\alpha$ -spectrometry analysis algorithms 57

### *Angioplastic balloon*

Determination of  $^{32}\text{P}$  activity by LSC 291

### *ANGLE*

Code: reliability for efficiency calibrations of HPGe detectors 703

### *Aquifer*

In S. Morocco: groundwater dating with radiocarbon 637

Karstic (Morocco): characterisation using a nuclear track detector and radon as a natural tracer 985

### *Argon*

Gas containing dioctyl phthalate irradiated to produce  $^{38}\text{Cl}$  and  $^{39}\text{Cl}$  aerosols: size analysis 615

### *Asia Pacific Metrology Program (APMP)*

Comparison of results on measurements of  $^{56}\text{Co}$ ,  $^{88}\text{Y}$  and  $^{166\text{m}}\text{Ho}$  421

(Abs) indicates an abstract.

\*Indicates a technical note.

<b>Barium</b>	
<sup>133</sup> Ba: half life measurements at NIST	125
<b>Beam</b>	
Compact low energy electron: development as an irradiator	697
Electron: surface dose with grids	477
<b>6-Benzylxy-7-(2-[<sup>18</sup>F]fluoroethyl)-7H-purin-2-yl-amine</b>	
Synthesis and evaluation	511
<b>6-Benzylxy-9-(2-[<sup>18</sup>F]fluoroethyl)-9H-purin-2-yl-amine</b>	
Synthesis and evaluation	511
<b>Bismuth</b>	
<sup>207</sup> Bi: half life determination at NIST	125
<sup>209</sup> Bi(n,3n) <sup>207</sup> Bi reaction: cross section measurements	731
<b>Bone</b>	
Cortical from human femoral neck: NAA determination of Ca, P and Ca/P ratios	781
<b>Book review</b>	
Plutonium in the environment, radioactivity in the environment, Vol. I	999
Practical applications of radioactivity and nuclear radiations	999
<b>Brachytherapy</b>	
BrachySeed (ModelLS-I): <sup>125</sup> I source Monte Carlo dose parameters	805
Calibration of NPL calibrator for <sup>125</sup> I seeds used in prostate cancer	321
InterSource <sup>125</sup> I source: dosimetric characterisation	589
Model 3500 <sup>125</sup> I source: dosimetric characterisation	581
Sources: activity characterisation	331
<b>Brain</b>	
Distribution of estrone sulfatase	773
<b>2-Bromo-1-[<sup>18</sup>F]fluoroethane</b>	
Synthesis and use in automated preparation of <sup>18</sup> F-fluoroethylated compounds	847
<b>Building</b>	
<sup>60</sup> Co contaminated: radiation surveys and dose equivalent assessment	901
<b>Calcium</b>	
NAA determination in human cortical bone from the femoral neck	781
<b>Calibrator</b>	
Dose: performance in Brazilian hospitals for activity measurements	361
NPL secondary standard radionuclide: calibration for <sup>125</sup> I seeds	321
Radionuclide: metrological certification for CURIEMENTOR 2	957*
Syringe calibration factors for radionuclides used in nuclear medicine	343
<b>Californium</b>	
<sup>252</sup> Cf depleted source: use in activation analysis of medium weight and heavy elements	577
<sup>252</sup> Cf source of neutrons: use in non-metallic land mine detection	837
<b>Calorimeter see also bolometer</b>	
Dual compensated cryogenic for radioactivity standardisation: development	223
Micro: use in standardisation of radionuclides emitting low energy radiation	245
<b>Carbon</b>	
Radiocarbon dating of groundwater in an aquifer in S. Morocco	637
<sup>11</sup> C standardisation for PET	327
<sup>13</sup> C hyperfine interactions of CO <sub>2</sub> <sup>-</sup> in irradiated tooth enamel: EPR study	815
<sup>14</sup> C: activity determination using a multi-channel time scaling technique for 3PM LS counting	307
<b>Carbon dioxide</b>	
CO <sub>2</sub> <sup>-</sup> : study of <sup>13</sup> C hyperfine reactions in irradiated tooth enamel by EPR	815
<b>CARPT (Computer Automated Radioactive Particle Tracking)</b>	

Technique for flow mapping in multiphase reactors : design and sensitivity	485
<i>Cascade summing</i>	
Corrections for HPGe spectrometers	105
<i>Cell</i>	
Electrochemical for separation of $^{18}\text{F}$ -fluoride from irradiated $^{18}\text{O}$ water	519
Lymphoma: uptake of $^{99\text{m}}\text{Tc}$ tetrofosmins and comparison with $^{99\text{m}}\text{Tc}$ sestamibi	853
<i>Cerium</i>	
Ceric sulphate dosimeter: investigation of the relation of the NMR relaxation rate to absorbed dose	895
<i>Cesium</i>	
Use of resonance ionisation mass spectrometry for determination of $^{133}\text{Cs}$ and $^{135}\text{Cs}/^{137}\text{Cs}$ ratios	369
$^{134}\text{Cs}$	
High precision determination of emission probabilities of principal $\gamma$ -rays	131
Standardisation: comparison of 3 methods	211
Use as an efficiency tracer to improve uncertainty in activity standardisation	253
$^{137}\text{Cs}$ : accumulation and dissolution in river bed sediment near Chernobyl	751
$^{137}\text{Cs}$ : half life determination at NIST	125
<i>Chelating agent</i>	
Evaluation for radium	667
<i>Chernobyl</i>	
Fallout: Pu and $\alpha$ -emitters in mushrooms	717
<i>Chlorine</i>	
$^{36}\text{Cl}$ : transport across an anion-exchange paper membrane	659
$^{38}\text{Cl}$ and $^{39}\text{Cl}$ aerosols produced by irradiation of argon: particle size analysis	615
<i>Chlorinolysis</i>	
$\gamma$ -ray induced: investigation for desulphurisation of high sulphur Indian coal	975
<i>Chromium</i>	
$^{48,49}\text{Cr}$ : separation from a $^7\text{Li}$ -ion irradiated $\text{Sc}_2\text{O}_3$ target	571
$^{51}\text{Cr}$ : multi method activity measurement	281
<i>CIEMAT/NIST</i>	
LSC method: limitations and uncertainties	357
<i>Coal</i>	
High sulphur, Indian: investigation of desulphurisation by $\gamma$ -ray induced chlorinolysis	975
<i>Cobalt</i>	
Co(II) sorption and desorption on alumina: mechanisms and effect of humic substances	765
$^{58}\text{Co}$	
Absolute counting and APMP comparison	429
APMP comparison results on radioactivity measurements	421
$^{60}\text{Co}$	
Contaminated buildings: radiation survey and dose equivalent assessment	901
Half life determination at NIST	125
Source production for high accuracy efficiency calibrations for $\gamma$ -spectrometers	215
Use as an efficiency tracer to improve uncertainty in activity measurements	253
<i>Cocktail</i>	
LS: examination for stability for $^{89}\text{Sr}$ solution standardisation	457
LS composition: influence for the standardisation of radionuclides using the TDCR method	285
<i>Code</i>	
ANGLE and LabSOCS: reliability for calculation of efficiency calibrations of HPGe detectors	703
IC(4) use for calculation of internal conversion coefficients	189

OMEGA/BEAM: use for Monte Carlo simulations of surface percent depth dose	505
<i>Coincidence summing correction</i>	
In $\gamma$ -ray spectrometry: interlaboratory study	117
<i>Copper</i>	
$^{64}\text{Cu}$ : determination of $\beta^-$ branching ratios by mass spectrometry of decay products in neutron transmuted Cu	145
<i>Counter</i>	
$4\pi$ pressurised gas proportional: use to standardise $^{89}\text{Sr}$	447
<i>Counting</i>	
Absolute: of $^{166\text{m}}\text{Ho}$ ; $^{56}\text{Co}$ and $^{88}\text{Y}$	429
$\alpha/\beta$ emitter: system used at INER (Taiwan)	261
Cherenkov of $^{90}\text{Y}$ in dry state: correlation with $^{32}\text{P}$ Cherenkov counting data	907
<i>Coincidence</i>	
Digital: use in corrections for out-of-channel $\gamma$ -events in $4\pi\beta\text{-}\gamma$ counting	205
Digital: use in standardisation of $^{152}\text{Eu}$ and $^{88}\text{Y}$	275
$4\pi\beta$ and $4\pi\beta\text{-}\gamma$ : use in standardisation of $^{89}\text{Sr}$	467
Method: use in $^{152}\text{Eu}$ standardisation in the BIPM comparison study	435
Software: absolute activity measurement using a digital method	265
System using the pulse mixing method: new set of electronic modules	269
Use to determine activity per mass of $^{152}\text{Eu}$	169
Efficiency of sample : determination of self determination correction from path length of $\gamma$ -rays	77
Internal gas proportional: analytical calculations of counting losses	231
<i>Liquid scintillation</i>	
CIEMAT/NIST method: limitations and uncertainties	357
3PM-LS: development of multichannel time scaling method	307
Stability of Instagel plus, Hi-safe III and Ultima gold when used in $^{89}\text{Sr}$ standardisations	457
Use in determination of $^{40}\text{K}$ half life	153
Use in standardisation of sources in South Africa	301
Use to determine $^{32}\text{P}$ activity in angio-plastic balloons	291
<i>Cross section measurements</i>	
For (n, 3n) reactions induced by 14.8 MeV neutrons	731
On $^{85}\text{Rb}(p, xn)$ reactions for production of Sr isotopes	685
<i>Crystal</i>	
GaAs and InP: crystalline quality by $\gamma$ -ray diffraction	833
<i>Cumin</i>	
Use of EPR spectrometry to distinguish between non-irradiated and irradiated samples and dose assessment	557
<i>CURIEMENTOR 2</i>	
Radionuclide calibrator: certification	957*
<i>Cyclotron</i>	
Production of medical isotopes: charged particle cross section data (Abs)	1001
<i>Damage depth profile</i>	
Measurement with a fast automatic RBS/w channelling system	627
<i>Data</i>	
Charged particle cross section for medical isotope production (Abs)	1001
Nuclear: for medical applications (Abs)	1001
Nuclear: influence on uranium enrichment results obtained by $Xk_x$ spectral analysis	85
<i>Dating</i>	
Of groundwater in an aquifer in S. Morocco with radiocarbon	637

Improvement of uncertainty in activity standardisation	253
<i>Electron</i>	
Beam radiation therapy: skin sparing effect using the grid technique	477
Low energy beam: development as an irradiator	697
Stopping power: influence on the ionisation quench factor	295
<i>Emission probabilities</i>	
For $\gamma$ -rays for $^{88}\text{Rb}$	163
From the decay of $^{226}\text{Ra}$ and daughters	137
Of kX-rays following decay of $^{237}\text{Np}$ in equilibrium with $^{233}\text{Pa}$	173
Of principal $\gamma$ -rays for $^{134}\text{Cs}$ : determination to a high precision	131
<i>Enamel</i>	
Tooth: EPR study of $^{13}\text{C}$ hyperfine interactions of $\text{CO}_2^-$	815
<i>Enzyme</i>	
DNA repair (MGMT): evaluation of activity in tumour tissue	511
<i>EPR</i>	
Spectrometry: use to distinguish between irradiated and non-irradiated cumin and dose assessment	557
Use to study $^{13}\text{C}$ hyperfine interactions of $\text{CO}_2^-$ in irradiated tooth enamel	815
<i>ESR</i>	
Use to study X-ray irradiation effects on soda lime container glass	621
<i>Estrone sulphatase</i>	
Distribution in rat brain by in vitro autoradiography	773
<i>Ethanol</i>	
Measurement of saturation in a porous medium by $\gamma$ -attenuation	601
<i>Europium</i>	
$\text{Eu}^{3+}$ complexes with humic and fulvic acids: stability constants	959
$^{151}\text{Eu}(\text{n}, 3\text{n})^{149}\text{Eu}$ reaction: cross section measurements	731
$^{152}\text{Eu}$	
Solution: measurement of disintegration rate and standardisation	441
Standardisation and BIPM comparison	435
Standardisation and half life determination	169
Standardisation by digital coincidence counting	275
$^{152}\text{Eu}$ , $^{154}\text{Eu}$ and $^{155}\text{Eu}$ : half life determination at NIST	125
<i>Excitation functions</i>	
Of $^{103}\text{Rh}(\text{p}, \text{n})^{103}\text{Pd}$ ; $^{103}\text{Rh}(\text{p}, 3\text{n})^{101}\text{Pd}$ and $^{103}\text{Rh}(\text{p}, 4\text{n})^{100}\text{Pd}$	821
Of $^{85}\text{Rb}(\text{p}, \text{xn})^{85\text{m.g.}83,82,81}\text{Sr}$ reactions and yield of $^{83}\text{Sr}$	685
<i>Explosive</i>	
Detection by PGAA and neural networks	937
<i>Extraction</i>	
Liquid-liquid: use to separate $^{48}\text{V}$ and $^{48,49}\text{Cr}$ in a $^7\text{Li}$ ion irradiated $\text{Sc}_2\text{O}_3$ target	571
<i>Fallout</i>	
Chernobyl and global of Pu and other $\alpha$ -emitters in mushrooms from Poland, Spain and the Ukraine	717
<i>Flow</i>	
Mapping in multiphase reactors: optimal design of radioactive particle tracking experiments	485
<i>Fluoride</i>	
$^{18}\text{F}$ : electrochemical cell for separation from irradiated $^{18}\text{O}$ water and use for $^{18}\text{F}$ fluorination	519
<i>Fluorine</i>	
$^{19}\text{F}(\text{p}, \text{xy})^{16}\text{O}$ reaction: yields, branching ratios and angular distributions of photons produced	877

<i>Decay</i>	
Complex chains: determination of cross sections for nuclear reactions	607
Data for $^{237}\text{Np}$	415
Data for $^{169}\text{Yb}$ : evaluation	181
Of $^{237}\text{Np}$ in equilibrium with $^{233}\text{Pa}$ : emission probabilities of k-X-rays	173
Of $^{236}\text{U}$ : feeding of $^{232}\text{Th}$ levels	567*
Scheme of $^{126}\text{La}$ isomers	543
<i>Detector</i>	
Germanium- $\gamma$ ray: efficiency calibration using GESPECOR software	71
HPGe: efficiency calibration using source measurements and Monte Carlo calculations	65
HPGe efficiency calibrations: reliability of ANGLE and LabSOCS calculation codes	703
LR115 in a diffusion chamber: sensitivity to $^{222}\text{Rn}$ in presence of $^{220}\text{Rn}$	953
Models: automated construction for efficiency interpolation in $\gamma$ -ray spectrometry	99
Solid state nuclear track: use for characterisation of water from aquifer in Oum-Er-Rbia basin (Morocco)	985
<i>Diffusion</i>	
Between Sr ions and Sr phosphomolybdate in aqueous solution: kinetics	797
Chamber: sensitivity of LR115 detector to $^{222}\text{Rn}$ in presence of $^{220}\text{Rn}$	953
<i>Digital signal processor</i>	
Used in $\gamma$ -ray spectrometry: basic characteristic parameters of 3 systems	93
<i>DNA</i>	
Repair enzyme $\text{O}^6$ -methylguanine-DNA-methyl transferase: activity evaluation in tumour tissue	511
<i>Dose</i>	
Assessment for irradiated cumin by EPR spectrometry	557
Calibrator: intercomparison in Brazilian hospitals for activity measurements	361
Characterisation: determination for Intersource $^{125}\text{I}$ brachytherapy source	589
Characterisation for Model 3500 $^{125}\text{I}$ brachytherapy source	581
Equivalent assessment in $^{60}\text{Co}$ contaminated rebar buildings	901
In digital imaging and radiology (Abs)	1001
Surface dose to skin: grid sparing effect in electron beam radiotherapy	477
Surface percent depth dose: Monte Carlo simulation	505
<i>Dosimeter</i>	
Alanine: uncertainties in therapeutic dose range	917
$\text{CaSO}_4\text{:Dy}$ : use to determine indoor dose rates in Gudalore (India)	883
Ceric sulphate: investigation of the NMR relaxation rate dose-response relationship	895
Glass-sol-gel glass doped with $\text{Eu}^{3+}$ ions: preparation and characterisation	563
Iodide/iodate solution for ionising radiation	525
<i>Dosimetry</i>	
Alanine: uncertainties in the therapeutic range	917
Activity characterization of $\beta$ -emitting brachytherapy sources	331
Calibration of NPL calibrator for dose rate determination for $^{125}\text{I}$ seeds	321
High level: $\gamma$ -dose: phototransferred thermoluminescence in quartz	891
Indoor $\gamma$ -dose measurements in Gudalore (India)	883
Of ionising radiation using an iodide/iodate solution	525
Parameters for BrachySeed model LS-1 $^{125}\text{I}$ brachytherapy source	805
<i>Efficiency curves</i>	
Energy dependent: fitting methods and their application to ionisation chamber measurements	237
<i>Efficiency tracer technique</i>	
CIEMAT/NIST $^3\text{H}$ standard: use in standardisation of $^{188}\text{W}/^{188}\text{Re}$	315

<i>[<sup>18</sup>F] FDG</i>	
Production by an alkaline hydrolysis: epimerisation study	871
<i>[16-<sup>18</sup>F] Fluoroestradiol-3,17<math>\beta</math>-disulfamate</i>	
Use to determine estrone sulfatase distribution in rat brain	773
<i>[<sup>18</sup>F]Fluoro ethylated compounds</i>	
Preparation from 2-bromo-1-[ <sup>18</sup> F] fluoroethane	847
<i>Foils</i>	
Used as activation detectors: epithermal neutron resonance self shielding factors	945
<i>Food</i>	
Cumin, irradiated: identification and dose assessment by EPR spectrometry	557
<i>Gadolinium</i>	
Ga <sup>3+</sup> complexes with humic and fulvic acids: stability constants	967
<i>Gallium</i>	
Arsenide single crystals: investigation of quality by $\gamma$ -ray diffraction	833
<i>Gamma ray</i>	
Attenuation: use to measure saturations for water, ethanol and LNAPL in a porous medium	601
Detection using sol-gel glass doped with lanthanide ions	563
Diffraction: use to determine quality of GaAs and InP single crystals	833
Emission probabilities for <sup>134</sup> Cs: determination to a high precision	131
Emission probabilities for <sup>88</sup> Rb	163
$\gamma$ - $\gamma$ coincidence techniques: for reduction of spectral interference in PGAA	535
Indoor dose measurements in Gudalore (India)	883
Induced chlorinolysis: investigation in desulphurisation of Indian coals	975
Measurement of average path length in samples using scattered radiation	77
Reference source for radiopharmaceuticals: standardisation	787
<i>Gas</i>	
Standards, multigamma simulated: development and preparation	47
<i>GESPECOR</i>	
Use to determine the efficiency transfer factor for Ge- $\gamma$ ray detectors	71
<i>Glass</i>	
Soda-lime: effects of X-irradiation	621
Sol-gel doped with lanthanide ions: preparation and characterisation for $\gamma$ -ray detection	563
<i>Grid</i>	
Technique: use in electron beam radiation therapy to reduce skin dose	477
<i>Half life</i>	
Determination of <sup>40</sup> K by LSC	153
Measurements at NIST for <sup>60</sup> Co, <sup>137</sup> Cs, <sup>85</sup> Kr, <sup>133</sup> Ba, <sup>207</sup> Bi, <sup>152</sup> Eu, <sup>154</sup> Eu and <sup>155</sup> Eu	125
Of <sup>152</sup> Eu	169
Of <sup>169</sup> Yb: interlaboratory evaluation	181
<i>Holmium</i>	
<sup>166</sup> Ho	
Absolute counting and APMP comparison	429
APMP comparison results on radioactivity measurements	421
Holmium dimethyl-diethylenetriaminepenta acetic acid (DMDTPA): preparation and evaluation for endovascular radiation therapy	863
Use as a multi- $\gamma$ standard for calibration of Ge spectrometers	157
<i>Humic substances</i>	
Effect of sorption and desorption of Co(II) on alumina	765

<i>Imaging</i>	
Digital: dose and image quality (Abs)	1001
Myocardial and cerebral: investigation of a $^{99m}$ Tc nitrido complex	857
Of a solid object: use of associated particle timing based on the D + D reaction	711
<i>Indium</i>	
InP single crystals: investigation of quality by $\gamma$ -ray diffraction	833
<i>INER (Institute of Nuclear Energy Research, Taiwan)</i>	
$\alpha$ - and $\beta$ -emitter measurement system	261
<i>Internal conversion coefficients</i>	
Calculations: use of IC(4) code	189
<i>International committee for radiation protection</i>	
Moral and legal obligation	763
<i>International committee for radionuclide metrology</i>	
Preface to proceedings of meeting, May 2001, PTB, Braunschweig, Germany	3
<i>Iodide/iodate</i>	
Dosimeter: evaluation for ionising radiation	525
<i>Iodine</i>	
I-Plant™ $^{125}$ I brachytherapy source: dosimetric characterisation	581
$^{124}$ I: PET quantitation and imaging evaluation	673
$^{125}$ I Intersource brachytherapy source: determination of dosimetric characteristics	589
$^{125}$ I seeds for brachytherapy: use of NPL calibrator for dose rate determination	321
$^{125}$ I: transport across an anion exchange paper membrane	659
$^{131}$ I and $^{123}$ I: intercomparison of activity measurements in Brazilian hospitals	361
<i>Ion exchange</i>	
Anion, paper membrane: transport of $^{125}$ I and $^{36}$ Cl	659
Use to determine stability constants of Eu $^{3+}$ and Am $^{3+}$ complexes with fulvic and humic acids	959
Use to determine stability constants of Tb $^{3+}$ , Yb $^{3+}$ and Ga $^{3+}$ complexes with fulvic and humic acids	967
<i>Ionization chamber</i>	
Centronic IG 12/20A: use to measure activity of $^{186}$ Re, $^{188}$ Re radiopharmaceuticals	349
Measurements and fitting methods for constructing energy dependent efficiency curves	237
SIR (International Reference System for $\gamma$ -activity measurements): efficiency curve	15
Use to maintain radioactivity standardisations	301
<i>Ionization quench factor</i>	
Influence of stopping power	295
<i>Iridium</i>	
$^{191}$ Ir(n, 3n) $^{189}$ Ir reaction: cross section measurements	731
<i>Irradiator</i>	
Low energy electron beam: development	697
<i>Isotopic exchange</i>	
Between Sr ions and Sr phosphomolybdate: kinetics in aqueous solution	797
<i>Krypton</i>	
$^{85}$ Kr: half life determination at NIST	125
<i>Laboratory</i>	
Brazilian: intercomparison study for environmental radionuclide measurements	409
Ultra low level for nuclear test ban measurements	375
<i>LabSOCS</i>	
Code: reliability for efficiency calibration of HPGe detectors	703

<i>Landmine</i>	
Non-metallic: detection by thermal neutron backscattering and Monte Carlo simulation	837
<i>Lanthanum</i>	
$^{126}\text{La}$ isomers produced from $^{94}\text{Mo}(^{36}\text{Ar}, 3\text{pn})$ reaction: decay scheme	543
<i>Lead</i>	
$^{210}\text{Pb}$ : determination by $\alpha$ -spectrometry in marine environmental samples	633*
<i>Lymphoma</i>	
Cell lines: uptake of $^{99\text{m}}\text{Tc}$ tetrofosmin and comparison with $^{99\text{m}}\text{Tc}$ sestamibi	853
<i>Mann, Wilfred Basil</i>	
Obituary	1
<i>Marinelli beaker</i>	
Use in the determination of corrections to the summations of photons	111
<i>Materials</i>	
Semi-conductor: fast automatic RBS/w channelling for damage depth profiling	627
<i>MGMT(O<sup>6</sup>-methylguanine-DNA-methyl transferase)</i>	
Evaluation of repair activity in tumour tissue in vivo	511
<i>Microscope</i>	
Scanning probe: use to study inhomogeneities of sources for $\alpha$ -particle spectrometry	31
<i>Monitor</i>	
$\alpha$ - and $\beta$ -contamination: preparation of large area sources for calibration purposes	21
<i>Monte Carlo</i>	
Calculation of epithermal neutron resonance shielding factors in foils	945
Calculations of efficiency calibration curves in $\gamma$ -ray spectrometry	99
Calculations to determine efficiency of an HPGe detector	65
Method: cascade summing corrections for HPGe spectrometers	105
N-transport code: use in detection of explosives	937
Simulation of surface per cent depth dose	505
Simulations as a feasibility tool for non-metallic landmine detection by thermal neutron backscattering	837
Use to establish dose parameters for the BrachySeed model LS-1 $^{125}\text{I}$ source	805
<i>MTR (Module de Temps-mort Reconductible)</i>	
New set of electronic modules for a coincidence system using the pulse mixing method	269
<i>Mushrooms</i>	
From Poland, Spain and the Ukraine: Pu, U and Th content	717
<i>National Institute of Standards and Technology (NIST)</i>	
Radiochemistry intercomparison program: a summary of a 4 year performance evaluation study	379
<i>NPL secondary standard radionuclide calibrator</i>	
Calibration for $^{125}\text{I}$ seeds for brachytherapy	321
Syringe calibration factors for radionuclides used in nuclear medicine	343
<i>Neptunium</i>	
$^{237}\text{Np}$	
Decay in equilibrium with $^{233}\text{Pa}$ : emission probabilities of kX-rays	173
Standardisation and decay data	415
<i>Neutron</i>	
Epithermal: resonance self shielding factors in foils	945
Thermal, backscattering: use to detect non-metallic landmines	837
<i>Nickel</i>	
$^{63}\text{Ni}$	

Improved uncertainty by using an efficiency tracer technique for specific activity	253
Standardisation using the TDCR method: influence of LS cocktail	285
<b>NMR</b>	
Relaxation rate in a ceric sulphate dosimeter and relation to absorbed dose	895
<b>Nuclear model</b>	
Calculations on proton induced reactions on $^{103}\text{Rh}$ up to 40 MeV	821
<b>Nuclear reactions</b>	
Determination of cross sections in complex decay chains	607
<b>Nuclear test ban</b>	
Measurements: design of an ultra-low-level laboratory	375
<b>Obituary</b>	
Wilfred Basil Mann	1
<b>OMEGA/BEAM</b>	
Code: use for Monte Carlo simulation of surface per cent depth dose	505
<b>Oxygen</b>	
$^{19}\text{F}(\text{p}, \text{xy})^{16}\text{O}$ reaction: yields, branching ratios and angular distributions of photons produced	877
<b>Palladium</b>	
$^{103}\text{Pd}$ production by the $^{103}\text{Rh}(\text{p}, \text{n})^{103}\text{Pd}$ reaction	821
<b>Particle</b>	
Associated, timing based on the D + D reaction: use for imaging solid objects	711
Charged: cross section data for radioisotope production (Abs)	1001
Radioactive: optimal design for tracking experiment for flow mapping in multiphase reactors	485
Size analysis of $^{38}\text{Cl}$ , $^{39}\text{Cl}$ aerosols formed by irradiation of Ar	615
<b>Peak</b>	
Resolution of overlap of $^{241}\text{Am}$ and $^{243}\text{Am}$ : competence of $\alpha$ -spectrometry algorithms	57
<b>PET</b>	
Quantitation and imaging of the non-pure positron emitting iodine iodine isotope $^{124}\text{I}$	673
Standardisation of $^{11}\text{C}$ sources	327
<b>Phosphorus</b>	
Determination in cortical bone from the human femoral neck by NAA	781
$^{32}\text{P}$	
Activity determination in angioplastic balloons by LSC	291
Cherenkov counting data: correlation with Cherenkov counting of $^{90}\text{Y}$ in the dry state	907
Stainless steel stent: measurement of activity	337
<b>Photon</b>	
Efficiency curve for the SIR ionisation chamber	15
Emission probabilities from decay of $^{226}\text{Ra}$ and daughters: measurement	137
6–7 MeV produced by the $^{19}\text{F}(\text{p}, \text{xy})^{16}\text{O}$ reaction: yields, branching ratios and angular distribution	877
Summations in Marinelli beakers: determination of corrections	111
<b>Plant</b>	
Rice, inoculated with <i>Pyricularia oryzae</i> : uptake of trace elements	473
<b>Plutonium</b>	
Content in mushrooms collected from Spain, Poland and the Ukraine	717
$^{239,240}\text{Pu}$ : accumulation and dissolution in river bed sediment near Chernobyl	751
<b>Polonium</b>	
$^{210}\text{Po}$ determination by $\alpha$ -spectrometry in marine environmental samples	633*

<i>Porous medium</i>	
Measurement and evaluation of saturations for water, ethanol and LNAPL by $\gamma$ -attenuation	601
<i>Potassium</i>	
$^{40}\text{K}$ : half life determination by LSC	153
<i>Proton</i>	
Induced reactions on $^{103}\text{Rh}$ : evaluation of excitation functions of the $^{103}\text{Rh}(\text{p}, \text{n})^{103}\text{Pd}$ reaction	821
<i>Quartz</i>	
Phototransferred thermoluminescence: application to high level $\gamma$ dosimetry	891
<i>Radiation</i>	
Injury avoidance(Abs)	1001
Ionizing: assessment of dose using an iodide/iodate solution	525
Protection, moral and legal obligations: editorial	763
Survey and dose equivalent assessment of $^{60}\text{Co}$ contaminated rebar buildings	901
Therapy, endovascular (EVRT): evaluation of $[^{166}\text{Ho}]$ DMDTPA	863
<i>Radioactivity</i>	
Concentrations in sediments and correlation to coastal structure in Kuwait	991
In bottled water sold in Mexico	931
Measurement: limitations and uncertainties of CIEMAT/NIST method	357
Measurements on $^{58}\text{Co}$ , $^{88}\text{Y}$ and $^{166\text{m}}\text{Ho}$ ; results from APMP comparisons	421
Standardisation in South Africa	301
Standardisations: development of a dual-compensated cryogenic micro-calorimeter for measurements	223
<i>Radiochemistry</i>	
NIST intercomparison program: summary of 4 year performance evaluation study	379
<i>Radiography</i>	
In vitro, auto: to determine distribution of estrone sulphatase in rat brain	773
<i>Radioisotope</i>	
Medical: charged particle cross section data (Abs)	1001
<i>Radiology</i>	
Interventional: dose assessment (Abs)	1001
<i>Radionuclide</i>	
$\alpha/\beta$ emitter measurement system used in INER (Taiwan)	261
$\alpha$ -emitting: content in mushrooms from Poland, Spain and the Ukraine	717
Calibrator (CURIEMENTOR 2): metrological certification	957*
Chernobyl derived in river bottom sediment: accumulation and dissolution	751
Emitting low energy radiation: standardisation	245
Environmental: intercomparison study of measurement capability of Brazilian laboratories	409
NIST radiochemistry intercomparison program: summary of 4 year performance evaluation study	379
Standardisation using TDCR model: effect of LS-cocktail composition	285
With 'triangular scheme' of disintegration: multi method of standardisation	281
<i>Radiopharmaceutical</i>	
Activity measurements	787
Preparation and evaluation of $[^{166}\text{Ho}]$ holmium DMDTPA for endovascular radiation therapy	863
$^{186}\text{Re}$ , $^{188}\text{Re}$ : measurement of radioactivity	349
<i>Radiotherapy</i>	
Electron beam: surface dose using the grid technique	477

<b>Radium</b>		
<sup>226</sup> Ra and daughters: measurement of photon emission probabilities from the decay	137	
<sup>226</sup> Ra: evaluation of potential chelating agents	667	
<sup>226</sup> Ra in water: comparison of methods of analysis	387	
<b>Radon</b>		
In soil: monitoring in the Krško basin, Slovenia	649	
<sup>222</sup> Rn in presence of <sup>220</sup> Rn: sensitivity of LR115 detector	953	
Use as natural tracer in characterisation of water sources in aquifers in Morocco	985	
<b>Reactor</b>		
Multiphase: optimal design of radioactive tracking experiment for flow mapping	485	
Nuclear power, of the Krško Basin, Slovenia: study of tetronic faults in region by radon monitoring	649	
<b>Rhenium</b>		
Uptake by rice plants inoculated with <i>Pyricularia oryzae</i>	473	
<sup>185</sup> Re(n, 3n) <sup>183</sup> Re reaction: cross section measurements	731	
<sup>186</sup> Re, <sup>188</sup> Re radiopharmaceuticals: measurement of activity	349	
<b>Rhodium</b>		
<sup>103</sup> Rh: proton induced reaction and evaluation of the excitation function of the	821	
<sup>103</sup> Rh(p, n) <sup>103</sup> Pd reaction		
<b>Rice</b>		
Plant inoculated with <i>Pyricularia oryzae</i> : uptake of trace elements	473	
—Water-soil system: behaviour of <sup>95</sup> Zr	735	
<b>Rock</b>		
Volcanic, from the Trindade and Martin Vaz Islands (Brazil): uranium concentration and activity ratios	741	
<b>Rubidium</b>		
Uptake by rice plants inoculated with <i>Pyricularia oryzae</i>	473	
<sup>85</sup> Rb target: excitation functions for the reactions <sup>85</sup> Rb(p, xn) <sup>85m,g,83,82,81</sup> Sr up to 100 MeV and cross section functions	685	
<sup>88</sup> Rb: determination of $\gamma$ -ray emission probabilities	163	
<b>Rutherford backscattering system (RBS)</b>		
With channelling: use for determination of damage depth profiling	627	
<b>Sample</b>		
Environmental: capability of Brazilian laboratories of analyses of radionuclides	409	
Marine environmental: determination of <sup>210</sup> Po and <sup>210</sup> Pb by $\gamma$ -spectrometry	633*	
Meteorite: deep underground measurement of <sup>26</sup> Al by $\gamma$ -spectrometry	405	
Meteorite: intercomparison of AMS with $\gamma$ -spectrometry for <sup>26</sup> Al measurements	399	
Solid: determination of Cs ratios by resonance ionisation mass spectrometry	369	
Solid: imaging by use associated particle timing based in the D + D reaction	711	
<b>Sediment</b>		
Lake: determination of Cs ratios by resonance ionisation mass spectrometry	369	
Radioactivity concentration and correlation to coastal structure in Kuwait	991	
River bottom: accumulation and dissolution of Chernobyl derived radionuclides	751	
Uranium and thorium isotopes: statistical study of concentration in samples	393	
<b>Selenium</b>		
Uptake by rice plants inoculated with <i>Pyricularia oryzae</i>	473	
<b>Self attenuation factor corrections</b>		
Calculation from average path length of $\gamma$ -rays in samples	77	
<b>Shielding</b>		
Design for detector system in an ultra-low-level laboratory for nuclear test ban measurements	375	

<i>Silica</i>	
Sorption and desorption of Co(II)	765
<i>Silicate</i>	
Rock: determination of U concentrations: activity ratios by $\alpha$ -spectrometry	741
<i>Skin</i>	
Sparing effect using grids in electron beam radiotherapy	477
<i>Software</i>	
Coincidence counting for absolute activity measurement	265
<i>Soil</i>	
Radon monitoring in the Krško Basin, Slovenia	649
-Rice-water system: behaviour of $^{95}\text{Zr}$	735
U and Th isotopes: statistical study of concentration in samples	393
<i>Source</i>	
$\alpha$ particle: effect of energy losses on shape of peaks in spectra	51
$\alpha$ particle: study of inhomogeneities	31
$^{60}\text{Co}$ production for high accuracy calibration of $\gamma$ -ray spectrometers	215
For measurement of absolute intensities of $^{226}\text{Ra}$ $\gamma$ -radiation when in equilibrium with decay products	37
Gamma reference: standardisation for radioactivity measurements of radiopharmaceuticals	787
Large area: preparation for calibration of $\beta$ and $\alpha$ contamination monitors	21
LS-1 $^{125}\text{I}$ brachytherapy: Monte Carlo parameters	805
<i>Spectrometer</i>	
$4\pi$ CsI(Tl) sandwich: use for standardisation of $^{89}\text{Sr}$	447
$\gamma$ -ray: production of $^{60}\text{Co}$ sources for high accuracy efficiency calibration	215
Ge calibration: use of $^{166}\text{Ho}$ as a standard	157
HPGe: Monte Carlo method for calculation of cascade summing corrections	105
Optical: use to study X-ray irradiation effects on soda-lime glass	621
<i>Spectrometry</i>	
$\alpha$ -: competence of analysis algorithms to resolve $^{241}\text{Am}$ and $^{243}\text{Am}$ peak overlap	57
$\alpha$ -particle: study of inhomogeneities in sources	31
$\alpha$ -: use in statistical study of U and Th isotopes in soil and sediment samples	393
$\alpha$ -: use to determine $^{210}\text{Po}$ and $^{210}\text{Pb}$ in environmental marine samples	633*
$\alpha$ -: use to determine U concentration and activity ratios in silicate rocks	741
EPR: use to distinguish between irradiated and non-irradiated cumin and dose assessment	557
EPR with alanine: uncertainties in therapeutic dose range	917
$4\pi$ -LS: use for standardisation of $^{89}\text{Sr}$	447
$4\pi\beta$ LS: use in standardisation of $^{188}\text{W}/^{188}\text{Re}$ with a CIEMAT/NIST $^3\text{H}$ standard efficiency tracing method	315
$\gamma$ -ray	
Automated construction of detector models for efficiency interpolation	99
Characterisation of 3 digital signal systems	93
Coincidence summing correction	117
Determination of corrections of time summation of photons for measurement in Marinelli beakers	111
In deep underground laboratory: measurement of $^{26}\text{Al}$ in meteorite samples	405
Ultra low level: use to determine $^{26}\text{Al}$ in meteorite samples and comparison with AMS	399
Use to determine radioactivity concentrations in Kuwait coastal sediments	991
HPGe- $\gamma$ : cascade summing corrections calculated by the Monte Carlo method	105
Mass: use to determine the $\beta$ -branching ratio of $^{64}\text{Cu}$	145
Resonance ionisation mass (RIMS): use for determination of Cs ratios in solid samples	369
Rutherford backscattering with channelling technique: use for damage depth profiling	627

xk <sub>α</sub> regional analysis: influence of nuclear data on uranium enrichment results	85
<i>Stability constants</i>	
Of Eu <sup>3+</sup> and Am <sup>3+</sup> complexes with fulvic and humic acids by ion exchange	959
Of Tb <sup>3+</sup> , Yb <sup>3+</sup> and Gd <sup>3+</sup> complexes with fulvic and humic acids	967
<i>Standards</i>	
Multi gamma for calibration of Ge-spectrometers: use of <sup>166</sup> Ho	157
Of <sup>226</sup> Ra: review from Marie Curie ICRM	5
Simulated gas, multi gamma: development	47
<i>Stent</i>	
<sup>32</sup> P stainless steel: activity measurement by destructive assay	337
<i>Strontium</i>	
Phosphomolybdate and Sr <sup>2+</sup> ions: kinetics of isotopic exchange in aqueous solution	797
<sup>83</sup> Sr: comparison of production routes and yields and thick target yield of <sup>82</sup> Sr	685
<sup>89</sup> Sr standardisation	
At the National Office of Measures	467
At VNIIM	453
By LS counting using a TDCR technique	461
Of a solution from a BIPM intercomparison	457
Using 3 different methods	447
<sup>90</sup> Sr: accumulation and dissolution in river bed sediment near Chernobyl	751
<i>Sulphur</i>	
Desulphurisation of Indian coal by $\gamma$ -ray induced chlorinolysis	975
<sup>35</sup> S: improved uncertainty using an efficiency tracer technique for specific activity determination	253
<i>Surface</i>	
Percent depth dose: Monte Carlo simulation	505
<i>Syringe</i>	
Calibration factors for radionuclides used in nuclear medicine	343
<i>Target</i>	
Enriched <sup>85</sup> Rb to produce <sup>83</sup> Sr and <sup>82</sup> Sr: integral tests for yield	685
<sup>7</sup> Li irradiated Sc <sub>2</sub> O <sub>3</sub> : separation of <sup>48</sup> V and <sup>48,49</sup> Cr by liquid-liquid extraction	571
<i>Technetium</i>	
Uptake by rice plants inoculated with <i>Pyricularia oryzae</i>	473
<sup>99m</sup> Tc	
Intercomparison of activity measurements in Brazilian hospitals	361
Nitrido complex: synthesis and bio distribution	857
Tetrofosmin: uptake in lymphoma cells and comparison with <sup>99m</sup> sestamibi	853
<i>Teeth</i>	
Enamel study by EPR: <sup>13</sup> C hyperfine interactions of CO <sub>2</sub> <sup>-</sup>	815
<i>Terbium</i>	
Tb <sup>3+</sup> complexes with fulvic and humic acids: stability constants	967
<i>Thallium</i>	
<sup>204</sup> Tl	
Activity using a multichannel time scaling technique for 3PM LS counting	307
Standardisation at VNIIM	453
Standardisation: self-absorption correction	199
<i>Thermoluminescence</i>	
Phototransferred in quartz: application to high level $\gamma$ -dosimetry	891
<i>Thorium</i>	
Statistical analyses of concentrations in soil and sediment samples	393

<sup>232</sup> Th: feeding of levels from decay of <sup>236</sup> U	567*
<sup>234</sup> Th: preparation and purification	681
<i>Toluene</i>	
Measurement of saturation 'as a LNAPL' in a porous medium by $\gamma$ -attenuation	601
<i>Trace element</i>	
Uptake by rice plants inoculated with <i>Pyricularia oryzae</i>	473
'Triangular scheme' of disintegration	
Standardisation	281
<i>TDCR ( triple to double coincidence ratio)</i>	
Use in LS counting in the standardisation of <sup>89</sup> Sr	461
<i>Tritium</i>	
<sup>3</sup> H standardisation by TDCR method: influence of LS cocktail	285
<i>Tumour</i>	
Lymphoma: uptake of <sup>99m</sup> Tc tetrofosmin and comparison with <sup>99m</sup> Tc sestamibi	853
<i>Tungsten</i>	
<sup>185</sup> W: improved uncertainty using an efficiency tracer technique for specific activity determination	257
<sup>188</sup> W/ <sup>188</sup> Re standardisation by $4\pi\beta$ LS spectrometry with the CIEMAT/NIST standard efficiency tracing method	315
<i>Uranium</i>	
Concentration and activity ratios in silicates by $\alpha$ -spectrometry	741
Depleted: recovery and purification of <sup>234</sup> Th	681
Influence of nuclear data on enrichment results obtained by $xk_\alpha$ spectral region analysis	85
Statistical analyses of concentration in soil and sediments	393
<sup>236</sup> U decay: feeding of <sup>232</sup> Th levels	567*
<i>Vanadium</i>	
<sup>48</sup> V: separation from a <sup>7</sup> Li-ion irradiated $\text{Sc}_2\text{O}_3$ target	571
<i>Water</i>	
Bottled (Mexican): radioactivity	931
Ground: dating with radiocarbon in an aquifer in S Morocco	637
Irradiated <sup>18</sup> O water: separation of <sup>18</sup> F -fluoride	519
Measurement of saturation in a porous medium by $\gamma$ -attenuation	601
Oum-Er-Rbia (Morocco) karstic sources: characterisation using a nuclear detector and Rn as a natural tracer	985
<sup>226</sup> Ra analysis: comparison of methods	387
—Rice-soil system: behaviour of <sup>95</sup> Zr	735
<i>X-ray</i>	
Irradiation effects on soda-lime container glass	621
K: emission probabilities following decay of <sup>237</sup> Np in equilibrium with <sup>233</sup> Pa	173
<i>Yerbium</i>	
<sup>169</sup> Yb: evaluation of decay data	181
Yb <sup>3+</sup> complexes with humic and fulvic acids: stability constants	967
<i>Yttrium</i>	
<sup>88</sup> Y	
Absolute counting and APMP comparison	429
APMP comparison results on radioactivity measurements	421

Standardisation by digital coincidence counting	275
$^{90}\text{Y}$ Cherenkov counting: correlation with $^{32}\text{P}$ Cherenkov counting data	907
<i>Zirconium</i>	
$^{93}\text{Zr}$ : separation and radiochemical analysis	41
$^{95}\text{Zr}$ : dynamics in a rice/water/soil system	735

